NOVEMBER/DECEMBER 2025

FECA54A/FECS54A/FSC53/CECA54A/ CECS54A/CSC53 — DATA MINING

Shanmuga Industries Arts & Science College
T.V.Malai

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

1. What is Data Mining?

2. Name the different kinds of Frequent Patterns.

3. List down the contents of Metadata Repository.

4. Compare OLAP Systems versus Statistical Databases.

5. How to generate association rules from Frequent Item Sets?

6. How are meta rules useful?

7. Define cluster analysis

8. Write the use of hierarchical method.

9. What are the applications of data mining?

10. What is orange data used for?

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Narrate the major issues in Data Mining.

Or

(b) Briefly discuss on data discretization and concept Hierarchy Generation.

12. (a) Differentiate between data Warehouse and Data Mart.

Or

(b) Summarize about the OLAP Operations.

13. (a) Illustrate the basic algorithm for finding frequent itemsets.

Or

(b) Describe about the rule based classification.

14. (a) Write short notes on Spatial Mining.

Or

(b) How can outliers affect data mining results? Explain.

15. (a) Briefly describe about the statistical data mining approach.

Or

(b) Discuss on the data mining applications in business and in science.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. Explicate the data Pre-Processing Techniques.

17. Examine the Data cube computation methods.

18. Discuss on the classification by decision tree induction.

19. Expound the significances of partitioning methods in cluster analysis.

20. Outline the recent data mining tools and its applications.

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